

CLAIMS

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-86. (canceled)

87. (Currently amended) A guidewire for use in a re-canalising process for re-canalising a vascular occlusion in a human or animal subject, the guidewire extending between a proximal end and a distal end, and defining a longitudinally extending main central axis, characterised in that the guidewire terminates at the distal end in a terminal member extending axially from the guidewire, the terminal member tapering to a distal leading edge portion for engaging and gradually opening the occlusion as the terminal member is urged therethrough,

wherein a first surface portion of the terminal member converges towards an opposite second surface portion of the terminal member, the leading edge portion being radiused from the first surface portion to the second surface portion to define a chisel edge,

and further wherein, the first and second surface portions of the terminal member are joined by spaced apart opposite third and fourth surface portions, the leading edge portion of the terminal member extending between the third and fourth surface portions.

88. (Previously presented) A guidewire as claimed in claim 87 in which the leading edge portion is an elongated leading edge portion.

89. (Previously presented) A guidewire as claimed in claim 87 in which the leading edge portion extends in a direction at an angle relative to an axial direction defined by the main central axis.

90. (Currently amended) A guidewire as claimed in claim 87 in which ~~the leading edge portion extends in a direction at an angle in the range of 1° to 90° relative to an axial direction defined by the main central axis and preferably,~~ the leading edge portion extends in a direction at an angle in the range of 30° to 90° relative to an axial direction defined by the main central axis.

91. (Cancelled)

92. (Currently amended) A guidewire as claimed in claim-~~91~~ 87 in which the distal portion of the first surface portion of the terminal member is concave in a longitudinal direction relative to the main central axis.

93. (Currently amended) A guidewire as claimed in claim-~~91~~ 87 in which ~~a distal portion of the second surface portion of the terminal member is concave, and preferably, a proximal portion of the second surface portion of the terminal member is convex, and advantageously, the second surface portion of the terminal member is convex in a transverse direction relative to the main central axis, and preferably [[,]]~~ the first and second surface portions terminate in the leading edge portion to define the leading edge portion as a chisel edge, ~~and preferably, the first and second surface portions of the terminal member define~~ defining an included angle in the range of 1° to 179°.

94. (Cancelled)

95. (Currently amended) A guidewire as claimed in claim-~~94~~ 87 in which the third and fourth surface portions of the terminal member ~~are parallel to each other in an axial direction defined by the main central axis, and alternatively, the third and fourth surface portions of the terminal member~~ taper towards the leading edge portion defining, the third and fourth surface portions of the terminal member defining an included angle in the range of 1° to 179°.

96. (Currently amended) A guidewire as claimed in claim-~~94~~ 87 in which the third surface portion of the terminal member is convex in a longitudinal direction relative to the main central axis.

97. (Currently amended) A guidewire as claimed in claim-~~94~~ 87 in which a distal portion of the third surface portion of the terminal member is concave in a longitudinal direction relative to the main central axis, a proximal portion of the third surface portion of the terminal member being

convex in a longitudinal direction relative to the main central axis, the fourth surface portion of the terminal member being convex in a longitudinal direction relative to the main central axis.

98. (Currently amended) A guidewire as claimed in claim ~~91~~ 87 in which the leading edge portion is radiused from the first surface portion of the terminal member to the second surface portion thereof.

99. (Currently amended) A guidewire as claimed in claim 87 ~~in which the leading edge portion is radiused in plan view, the leading edge portion is convex in plan view, and the leading edge portion is concave in plan view.~~

100. (Previously presented) A guidewire as claimed in claim 87 in which the maximum outer transverse cross-sectional area of the terminal member is similar to the outer transverse cross-sectional area of the guidewire adjacent the terminal member.

101. (Previously presented) A guidewire as claimed in claim 87 in which the guidewire comprises an elongated core wire extending from the proximal end to the distal end, the terminal member is secured to the distal end of the core wire, the core wire terminates in a distal portion of rectangular transverse cross-section defining first and second opposite major surfaces joined by first and second opposite minor surfaces for facilitating bending thereof for offsetting the terminal member relative to the main central axis for facilitating guiding of the terminal member into a branched vessel of a vascular system, a reinforcing means being provided on the distal portion of the core wire for minimising axial twisting thereof.

102. (Previously presented) A guidewire as claimed in claim 101 the first and second major surfaces of the distal portion of the core wire define therebetween a central major plane extending parallel to the main central axis and cutting the first and second minor surfaces, the distal portion being curved in the central major plane for offsetting the terminal member relative to the main central axis for facilitating guiding of the terminal member into a branched vessel of a vascular system.

103. (Previously presented) A guidewire as claimed in claim 101 further comprising a sleeve extending along the core wire from the terminal member and terminating at a location intermediate the distal end and the proximal end of the core wire, the sleeve being of external circular transverse cross-section, the external diameter of the sleeve being similar to the diameter of the terminal member adjacent the guidewire, the sleeve comprising a helical coil located around the core wire adjacent the distal end thereof, a plug extending from the terminal member adjacent a proximal end thereof for engaging an internal bore defined by the sleeve for securing the sleeve to the terminal member.

104. (Previously presented) A guidewire as claimed in claim 101 in which a core wire engaging bore extends into the terminal member for engaging the distal end of the core wire, the terminal member being secured to the core wire by brazing, or soldering, welding or adhesive.

105. (Previously presented) A guidewire as claimed in claim 87 in which at least a portion of the terminal member is of radiopaque material, and a distal portion of the guidewire is of a magnetic material for facilitating urging of the terminal member through a vascular system by a magnetic urging means located externally of the subject.

106. (Cancelled)

107. (Previously presented) A method for re-canalising a vascular occlusion in a human or animal subject, the method comprising urging the terminal member of the guidewire of claim 87 through the occlusion for gradually opening thereof, the terminal member being urged by the guidewire through the vascular system to the occlusion prior to being urged through the occlusion by a magnetic urging means located externally of the subject.

108. (New) A guidewire according to claim 87 wherein the third and fourth surface portions of the terminal member are convex in a transverse direction relative to the main central axis.

109. (New) A guidewire according to claim 87 wherein the third and fourth surface portions of the terminal member are planar in a transverse direction relative to the main central axis.